# IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF TEXAS WACO DIVISION

HAMMOND DEVELOPMENT INTERNATIONAL, INC.,

Plaintiff,

-VS.-

Case No. 6:19-CV-00355-ADA

AMAZON.COM, INC., AMAZON.COM LLC, AMAZON.COM SERVICES, INC., and AMAZON WEB SERVICES, INC.,

Defendant.

**AMAZON'S OPENING CLAIM CONSTRUCTION BRIEF** 

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Defendants Amazon.com, Inc., Amazon.com LLC, Amazon.com Services, Inc., and Amazon Web Services, Inc. (collectively, "Amazon") submit this opening claim construction brief.

#### **INTRODUCTION**

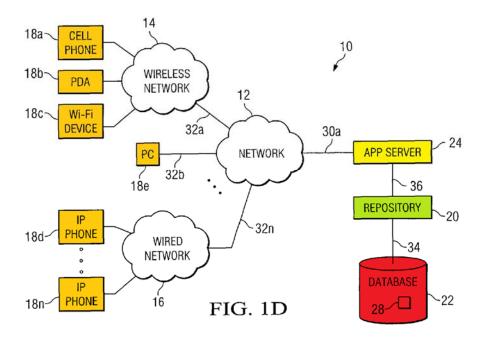
Our patent laws advance science and the useful arts by rewarding inventors with a limited monopoly. However, a fundamental rule of our patent laws is that the boundaries of that monopoly must be clear. The public must be able to consult the patent and its prosecution history and know, with reasonable certainty, what falls within the monopoly and what falls outside the monopoly. A patent that fails to provide clear notice of what is claimed is invalid as indefinite.

The patents asserted in this case, which describe using a conventional client-server communication system to run applications on a server, violate this fundamental rule with respect to two claim limitations. The first limitation recites that the server "establishes a communication session" with the client in response to a "request" from the client. The second limitation recites that the server sends the client a "request for processing service." For each of these limitations, a skilled artisan reading the specification would understand the limitation to have a certain meaning and thus, certain boundaries. However, the patentee's statements in the prosecution history—to which the patentee must be held if the prosecution history is to perform its intended notice function—would lead a skilled artisan to conclude that these limitations have different meanings that contradict the meanings suggested by the specification. Such ambiguity regarding the scope of the claims—and thus the boundaries of the inventor's monopoly—is impermissible. The claims are therefore invalid as indefinite.

#### OVERVIEW OF THE ASSERTED PATENTS

The eight Asserted Patents<sup>1</sup> share a common specification and describe a conventional client-server system that allows a user of a client device to interact with an application (e.g., computer program) being executed on a remote server. Such systems have been used for decades because they allow users with client devices of limited capabilities to run programs on more powerful remote servers. This increases the speed of the applications and eliminates the need for the client device to store all applications locally. (Dkt. 1-2 ('483 patent) at 10:66-11:2, 7:51-55.)

As shown in Figure 1D, the patented system 10 includes client devices 18a-n connected via a conventional network to an application server 24:



(Id. at FIG. 1D (annotated).)<sup>2</sup> The client device may be any conventional device, such as a "wireless device, a voice over IP device, a desktop computer, a laptop computer, a personal digi-

<sup>&</sup>lt;sup>1</sup> The "Asserted Patents" are U.S. Patent No. 9,264,483 ("the '483 Patent"), U.S. Patent No. 9,420,011, U.S. Patent No. 9,456,040, U.S. Patent No. 9,705,937, U.S. Patent No. 9,716,732, U.S. Patent No. 10,193,935, U.S. Patent No. 10,264,032 ("the '032 Patent"), and U.S. Patent No. 10,270,816 ("the '816 Patent"). (*See* Dkt. 1-2 through 1-9.)

<sup>&</sup>lt;sup>2</sup> Citations to the common specification are to the '483 patent (Dkt. 1-2) and are in column:line format.

tal assistant [PDA], a cell-phone, ... or any other computing and/or communicating device." (*Id.* at 4:2-7; *id.* at 5:49-51 (client may be a landline phone and/or IP phone).) The network may be any conventional wired or wireless network "capable of supporting communication between network elements," including the Internet or common telephone network. (*Id.* at 3:41-53.)

The patents disclose that, in use, a client sends a "request" to the application server. (*Id.* at 5:57-62.) The application server notifies the repository, which sends the appropriate application to the application server. (*Id.* at 6:17-24.) The application may be, for example, a VoiceXML application.<sup>3</sup> (*Id.* at 6:26-33.) The application server executes the application and begins a "communication session" with the client, which includes communicating information to and/or retrieving information from the client. (*Id.* at 6:22-26.) For example, the application server can request that the user respond to a series of queries associated with the application. (*Id.*, 6:49-54.) The user's responses, which may be provided via a keyboard input, DTMF input, 4 voice input, or stylus input, are sent back to the application server. (*Id.* at 6:55-67.) In some embodiments, the user may speak a response, which the client packetizes and sends to the server. (*Id.* at 6:59-65.)

HDI currently alleges infringement of 60 claims across the eight Asserted Patents. Claim 10 of the '483 patent, reproduced below with some of the phrases at issue in red, is representative of the asserted claims:

10. A communication system capable of enabling one or more communication devices to remotely execute one or more applications, comprising:

<sup>&</sup>lt;sup>3</sup> VoiceXML is a standard markup language designed for creating audio dialogs that feature synthesized (computer-generated) speech, digitized audio, recognition of spoken and DTMF key inputs, recording of spoken input, and telephony. (Ex. A2 ¶27-31; Ex. A4.)

 $<sup>^4</sup>$  "DTMF" stands for "dual-tone multi-frequency" and refers to the keys on a conventional touch-tone phone. (See Ex. A2  $\P27$ .)

one or more application servers coupled to a first communication link, the first communication link comprising a data connection, at least one of the one or more application servers adapted to execute an application to establish a communication session with at least one communication device coupled to the data connection in response to a request from the at least one communication device to establish the communication session, the at least one application server residing at a location remote from the at least one communication device;

wherein the at least one application server is operable to receive over a second communication link an application from a repository having access to one or more applications maintained in a database coupled to the at least one repository,

wherein the at least one application server is further operable to execute the received application remote from the at least one communication device and to establish the communication session with the at least one communication device,

wherein the at least one application server is operable to communicate a request for processing service to the at least one communication device, and wherein the request for processing service is communicated to the at least one communication device over the data connection, and wherein the request for processing service comprises one or more queries for information from a user.

(Dkt. 1-2 at claim 10.) The dependent claims specify, for example, the type of input (e.g., key-board or voice) used to respond to the queries or that the request for processing services includes an instruction to present information to the user. (*See, e.g., id.*, claims 15-18.)

As set forth in the Joint Claim Construction Chart (Ex. A1)<sup>5</sup>, Amazon has identified three groups of terms that it contends are indefinite. (Ex. A1, terms 1-3.) HDI has identified three terms for construction. (*Id.*, terms 9-11.) Amazon does not address terms identified by Google for construction. (*Id.*, terms 4-8.)

<sup>&</sup>lt;sup>5</sup> Amazon's exhibits are identified by the "A" prefix and are attached to the Heideman Declaration, which is being filed concurrently herewith.

#### **ARGUMENT**

### I. LEGAL STANDARDS

# A. Claims Are Construed in Light of the Patent and Prosecution History.

Claim terms are generally given their ordinary and customary meaning to a person of ordinary skill in the art ("POSITA")<sup>6</sup> at the time of the invention, in view of the entire patent and prosecution history. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005). Of particular relevance in this case is the importance of a patentee's statements during prosecution. Such statements are highly relevant to the claim construction analysis because a patentee can define, explain, or disavow claim scope during prosecution. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 789 F.3d 1335, 1343-44 (Fed. Cir. 2015). As the Federal Circuit has stated, "[t]he public notice function of a patent and its prosecution history requires that a patentee be held to what he declares during the prosecution of his patent." *Id.* (quoting *Springs Window Fashions LP v. Novo Indus., L.P.*, 323 F.3d 989, 995 (Fed. Cir. 2003)). The doctrine of prosecution disclaimer "ensures that claims are not 'construed one way in order to obtain their allowance and in a different way against accused infringers." *Aylus Networks, Inc. v. Apple Inc.*, 856 F.3d 1353, 1360 (Fed. Cir. 2017) (quoting *Southwall Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1576 (Fed. Cir. 1995)).

The relevant prosecution history includes the prosecution of related patents, even if they post-date the issuance of the particular patent at issue. *Teva*, 789 F.3d at 1343. The relevant prosecution history also includes statements made during IPR proceedings. *Aylus Networks*, 856

<sup>&</sup>lt;sup>6</sup> A POSITA of the Asserted Patents would have had at least a bachelor's degree in Computer or Electrical Engineering, Computer Science, or equivalent engineering discipline, and approximately three years of experience working on client-server systems for operating applications, including HTML and voice dialogue applications. (Ex. A2 ¶¶ 23-25.)

F.3d at 1360; *Multimedia Content Mgmt. LLC v. Dish Network Corp.*, No. 6:18-cv-00207-ADA, Slip Op. at 4 (W.D. Tex. June 17, 2019) (noting that the intrinsic record includes the patent owner's positions and statements in the IPR and relying on patent owner's disclaimer in its preliminary response).

# B. Claims Are Indefinite When Their Scope Lacks Reasonable Certainty.

The fundamental rule requiring a patentee's limited monopoly to have clear boundaries is set forth in 35 U.S.C. § 112, ¶2, which provides that a patent's claims must "particularly point[] out and distinctly claim[] the subject matter which the applicant regards as [the] invention." A claim does not meet this standard, and is invalid as indefinite, if the claim, read in light of the specification and prosecution history, fails to inform those skilled in the art about the scope of the invention with "reasonable certainty." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014). As the Supreme Court has recognized, absent a "meaningful definiteness check," patentees face "powerful incentives to inject ambiguity into their claims." *Id.* 

In view of the "inherent limitations of language," the definiteness standard does not require precision. *Id.* at 909-910. But it does require clarity, and the patent must be "precise enough to afford *clear notice* of what is claimed, thereby apprising the public of what is still open to them." *Id.* at 909 (emphasis added). Where the evidence—including the patentee's statements in the prosecution history—provide conflicting meanings for a claim term, it is indefinite. *See Teva*, 789 F.3d at 1345 (term is indefinite where claim language was ambiguous and patentee provided conflicting meanings during prosecution of related patents); *Kyowa Hakko Bio, Co. v. Ajinomoto Co.*, No. 17-cv-00313-MSG, 2019 WL 5061066, at \*10 (D. Del. Oct. 9, 2019) (term is indefinite where it had a plain meaning in the art but patentee's conflicting statements in related prosecution created ambiguity); *Transcend Med., Inc. v. Glaukos Corp.*, No. 13-

830, 2015 WL 5546988, at \*7 (D. Del. Sept. 18, 2015) (finding term indefinite where specification and prosecution provide conflicting meanings and rejecting patentee's "attempt to salvage the inconsistency by adopting the term's plain and ordinary meaning" because doing so "impermissibly rewrites the specification and ignores the relevant prosecution history"); *Infinity Comp. Prods., Inc. v. Oki Data Ams., Inc.*, No. 18-463-LPS, 2019 WL 2422597, at \*5 (D. Del. June 10, 2019) (patentee's "materially inconsistent" positions render claim indefinite).

### II. THE "COMMUNICATION SESSION" TERMS ARE INDEFINITE.

Virtually all of the asserted claims require that the client device "request" and that the application server "establish" a "communication session." (See Ex. A1, terms 1a-1b.) These claim limitations are indefinite for two independent but related reasons. First, these limitations are indefinite because the prosecution history defines the "communication session," and how it is "established," in a manner that contradicts the specification and claims. Specifically, HDI has argued in its preliminary responses to two IPRs, which are part of the prosecution history, that "communication session" means a connection between a client and server. But this meaning from the prosecution history contradicts the specification and claims, where the "communication session" is a post-connection exchange of information. These contradictory meanings cannot be reconciled. Second, the claims are indefinite because they require that the client "request" and the server "establish" the communication session, but the intrinsic evidence provides no coherent way to determine what constitutes "requesting" a communication session and what constitutes "establishing" the communication session. Because a POSITA would not understand the scope of these limitations with reasonable certainty, they are indefinite as described in detail below.

# A. The Claims Show that a Communication Session Is a Post-Connection Exchange of Information.

The claims recite that a client "communication device" communicates a "request to establish a communication session" to an "application server." (*See e.g.*, Dkt. 1-2 ('483 Patent) at 13:5-18 (claim 1).) The application server must then "establish the communication session." (*Id.* at 13:28-32.) Logically, to receive the "request" from the client, the application server must be connected to the client. And because the "request" occurs before the "communication session" is established, the connection must be in place before the communication session begins. Indeed, the claims confirm this by reciting that the client first establishes a "communication link comprising a data connection," and then the server establishes a communication session with the client "coupled to the data connection." (Dkt. 1-6 ('732 patent) at claim 19.) Thus, the communication session is a *post-connection* exchange of information.

The claims also show that the communication session is established when the application server executes an application and begins communicating information relating to that application to the client. (*See*, *e.g.*, Dkt. 1-2 at claim 10 (server adapted to "execute an application to establish a communication session"), Dkt. 1-6 at claim 19 (same).)

# B. The Specification Shows That Establishing a Communication Session Means Beginning a Post-Connection Exchange of Information.

The specification does not directly define "communication session" or expressly state how a communication session is "established" by a server or "requested" by a client. Consistent with the claims, however, a POSITA would recognize that the communication session disclosed in the specification is established only *after* the client has connected to the server. This post-connection exchange of information occurs when the server executes an application and begins communicating to the client information relating to that application.

The specification states that a client can "initiate a data connection" with the application server. (*Id.* at 5:27-33.) Then, the application server can "initiate a preliminary communication session with the user of client 18." (*Id.* at 5:33-35.) This preliminary communication session begins only "[a]fter the client 18 connects to application server 24"—i.e., post-connection. (*Id.*) Through this communication session, the server gathers information from the client device, either "by reading a unique identification number of the device or by question and answer sequences with the user of [the] device." (*Id.* at 5:35-40.) Thus, the communication session is a post-connection exchange of information between the client and the server.

The specification also describes an embodiment in which the client "initiates" a communication session by sending a "request" to the server. (*Id.* at 5:59-62.) In response, the application server "executes application 28 and begins a communication session with client 18a." (*Id.* at 6:22-29.) Specifically, the application server "begins the process of communicating information to and/or retrieving information from client 18a." (*Id.*) This disclosure confirms that the communication session is "established" post-connection because the client must have already been connected to the server in order for the server to receive a "request" from the client. This disclosure also confirms that a "communication session" is established when the server executes an application and "begins the process of communicating information to and/or retrieving information from client 18a." (*Id.*) Thus, the communication session is a post-connection exchange of information relating to a specific application.

This understanding is consistent with another example in the specification, in which a user checks his bank account balance. The user's client device "initiates a communication session with application server 24a by communicating a request through network 12." (*Id.* at 8:42-45.) The application server 24a "executes the application 28 and initiates its communication session

with client 18b." (*Id.* at 8:57-58.) Again, the server receives a "request" from the client, showing that the client and server are connected before an application is executed to begin the communication session.

After the communication session begins, the following occurs: the server sends an executable to the client that, when executed, prompts the user to enter his account number; the client communicates the account number to the server; the server obtains the balance and communicates the balance to the client; and the client presents the balance to the user via a display or speaker. (*Id.* at 9:6-45.) The "communication session" thus encompasses a post-connection exchange of information between the client and the server. The server "establishes" the communication session in this example when it executes an application and begins the process of communicating application-specific information to the client.

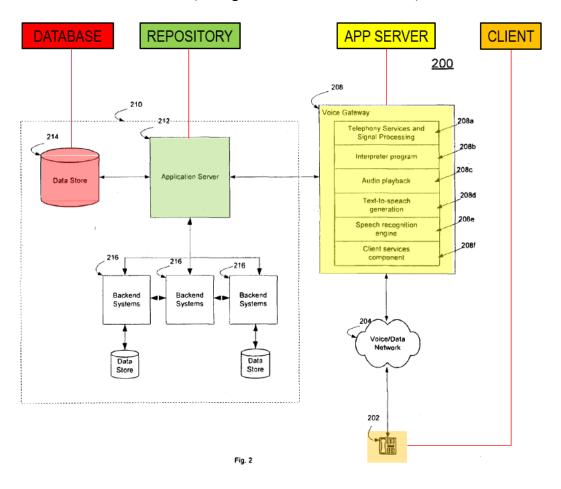
Based on the specification and claims, without more, a POSITA would understand that a "communication session" is a post-connection exchange of information between a client and server, and that an application server "establishes" the communication session when it begins the exchange, i.e., when it executes an application and begins communicating application-specific information to the client. However, the claims must be interpreted in light of the prosecution history as well as the specification.

# C. The Prosecution History Provides a Conflicting Interpretation.

In October and November, 2019, Google filed its first two IPR petitions relating to the Asserted Patents. (Exs. A5, A9.) HDI filed responses. (Exs. A7, A10.) HDI's statements in those proceedings are part of the prosecution history and they contradict the meaning of "communication session" in the specification and claims. HDI's statements also inject ambiguity into what it means to "request" or "establish" such a session.

### 1. Google's Prior Art Reference Disclosed a Post-Connection Exchange of Information.

Understanding the prior art reference upon which Google relied in its IPR ("Gilmore," Ex. A8) is critical to understanding the impact of HDI's statements regarding the scope of its claims. As shown in Figure 2 of Gilmore below, Gilmore's system has the same architecture as the system described in the Asserted Patents. Gilmore's system includes a "voice communication device 202" (analogous to the claimed client/communication device) connected via a data network to a "voice gateway 208" (analogous to the claimed application server), which is connected to an "application server 212" (analogous to the claimed repository), which retrieves applications from a "Data Store 214" (analogous to the claimed database):



(Ex. A8, Fig. 2 (annotated),  $\P[0036]$ -[0046].)

In operation, the voice gateway (server) receives a user's call over a network from a voice communication device 202 (client) such as a cellular phone, PDA, or voice-enabled computer. (*Id.* ¶¶[0033], [0038], [0030].) The network may be a conventional telephone network, a packet-switched data network, "or any other network able to carry voice." (*Id.* ¶[0031].) For example, the data network may include Internet Protocol-based networks and may support voice using Voice-over-IP or other comparable protocols used for voice data communications. (*Id.*)

Upon receiving a user's call, the voice gateway retrieves and executes "voice programs," i.e., applications. (*Id.* ¶[0039].) Those voice programs may be VoiceXML scripts (*id.* ¶[0033]), just as in the Asserted Patents. The voice gateway "parses the script by searching and executing the voice-specific instructions within the script." (*Id.* ¶[0048].) The first instruction may be a prompt, which is sent to the communication device 202 over the data network 204 and played to the caller. (*Id.*) The voice gateway then listens for a "spoken input from the caller." (*Id.* ¶[0049].) The voice gateway processes the caller's response. (*Id.* ¶[0050].)

In one example, Gilmore describes that, upon receiving a call, the voice gateway will retrieve scripts from the application server, process those scripts, and provide a list of options to the caller, such as whether they want information about their paycheck history, vacation balance, or 401k information. (*See*, *e.g.*, *id.* at Table 2.)

# 2. Google Construed "Establishing a Communication Session" Consistent with the Specification.

In its Petition, Google explained that Gilmore "discloses establishing a communication session by executing a VoiceXML application that allows the user to begin interacting with voice gateway 108/208 (application server) by responding to prompts or queries." (Ex. A5 at 15; *see also* Ex. A9 at 24-25.) Specifically, Google and its expert asserted that the "voice gateway 108/208 begins (e.g., establishes) the communication session when interpreter 208b executes the

interactive VoiceXML application and send[s] prompts that the user can interact with and respond to." (Ex. A5 at 15; Ex. A6 ¶86-88.)

Google explained that this disclosure in Gilmore constitutes "establishing a communication session" based on the '483 patent specification. (Ex. A5 at 16.) Specifically, Google explained that "the '483 patent states that application server 24 executes a VoiceXML application to begin or establish 'a communication session with client 18a,' which includes 'communicating information to and/or retrieving information from client 18a." (*Id.*) Google also explained that this understanding was consistent with the VoiceXML specification, which provides that a "session" "begins when the user starts to interact with a VoiceXML interpreter context." (*Id.*)

Thus, Google argued that, in Gilmore, the user's initial call to the system constitutes a "request" to establish a communication session, and that the gateway (application server) "establishes" that communication session by executing an application and beginning to exchange application-specific information with the user's device.

### 3. HDI's Arguments Contradicted the Specification.

In its patent owner preliminary response ("POPR"), HDI attempted to distinguish its claims over Gilmore and, in doing so, made several statements that contradict the specification and make the meaning of the claim terms uncertain. *Stasher, Inc. v. Zip Top, LLC*, No. W-18-cv-00312-ADA, Slip Op. at 3 (W.D. Tex. June 19, 2019) ("distinguishing the claimed invention over the prior art during prosecution indicates what a claim does not cover").

First, HDI cited the VoiceXML standard, which defines a "session" as a "connection between a user and an implementation platform," to argue that the user's call in Gilmore—rather than the server's execution of the VoiceXML application in response to that call—"establishes a communication session." (Ex. A7 at 35 (dialing a telephone number is "not a request to establish a communication session; rather, it *is itself* the establishment of a call session"), 37 (server's ex-

ecution of VoiceXML application cannot "establish" the communication session because communication session "has already been established" by phone call); Ex. A10 at 41-42.) This definition of what constitutes "establishing a communication session" contradicts the specification.

The specification expressly distinguishes between a *connection* and a *communication session*, thereby making clear that establishing a connection is *not* the same as establishing a communication session. Indeed, the specification provides that the server establishes a communication session *after the client connects* to the application server. (Dkt. 1-2 at 5:33-35, 1:67-2:7, 8:42-61.) Thus, HDI's defining of "establishes a communication session" to include connecting to a gateway contradicts the meaning in the specification. Indeed, the specification expressly states that "[l]andline phones and/or IP phones [as disclosed in Gilmore] can also communicate with repository 20 and/or application server 24 *in the same manner as mobile phones described above.*" (*Id.* at 5:49-51.) Thus, a landline or IP phone must be able to connect to the server and send a "request" to the server (without such a connection establishing a communication session) so that the server can then establish a communication session.

Second, HDI's arguments inject ambiguity into the distinction between "requesting" and "establishing" a communication session. HDI never explained—and a POSITA reading the intrinsic record would not know—why the user's call in Gilmore "establishes" a communication session instead of merely "requests" that the server establish a communication session. A POSITA would not know, based on the intrinsic record, how to distinguish between a "request" to establish a communication session and the actual establishment of the session. Indeed, the patent and prosecution history never explain how the client described in the '483 patent can connect to the application server in order to "request" a communication session, without the client's connection itself "establishing" the communication session per the prosecution history. Nor does the

patent or prosecution history explain how an application server can "establish a communication session" after a client has already established a connection, if establishing a connection *is* establishing the communication session. The meaning provided by the specification (that a client connects to the server and *then* the server executes an application to establish a communication session) and the meaning provided by HDI's POPRs (that a client establishes a communication session when it connects to the server) are contradictory and irreconcilable.

HDI's POPRs exacerbated the ambiguity by block-quoting and emphasizing portions of the specification that state that the application server may "establish a data socket connection to communicate with the client." (*See* Ex. A7 at 39; Ex. A10 at 46-47.) HDI's statements during prosecution equating "establishing a communication session" with "establishing a data socket connection" would lead a POSITA to understand the term to mean something different than the meaning in the specification. Again, HDI's representation that establishing a communication session refers to establishing a *connection* directly contradicts the specification, which discloses that the server establishes a communication session *after* the client connects to the server. (Dkt. 1-2 at 5:33-35.)<sup>7</sup> HDI advocated this inconsistent position in an attempt to save its claims from the prior art, but in doing so rendered the scope of its claims profoundly uncertain.

### 4. HDI Refused to Provide Any Express Definition.

Although HDI criticized Google's understanding of the phrase "establishing a communication session," HDI tellingly refused to offer its own construction. (Ex. A7 at 28-29; Ex. A10 at 33-35.) Instead, HDI side-stepped the issue, argued that it was "not required to propose claim

<sup>&</sup>lt;sup>7</sup> HDI's statements in other sections of its POPR lead to even more ambiguity. HDI recognized that the claims recite a "communication link comprising a data connection" and stated that the "data connection" is, for example, a data socket connection. (Ex. A7 at 42-43; Ex. A10 at 50.) Thus, according to a different portions of HDI's POPRs, establishing a data socket connection is establishing a data connection, not establishing a communication session, which occurs *after* the connection is established. (Ex. A7 at 39; Dkt. 1-2 at 5:33-35.)

constructions in a Preliminary Response," noted that the parties are "currently engaged in the claim construction process in the co-pending District Court proceeding," and purported to reserve its right to identify claim constructions later. (Ex. A10 at 35 n.4.) Now, in claim construction, HDI still refuses to identify any construction for these terms, arguing that no construction is necessary. (Ex. A1.)

# D. "Communication Session" Has No Single Meaning in Conventional Usage.

As shown by a technical dictionary from the relevant time period, a "session" can be either: (1) a "period during which a user is *connected* to a *computer* or communications network;" or (2) a "period during which an individual or entity uses *an application* or program." (Ex. A3 (emphases added).) Here, the prosecution history is consistent with definition (1), but the specification and claims are consistent with definition (2). If a communication session is established when a client connects to a server, then the session is the period in definition (1) and it is established *before* any application is launched on the server. But if a communication session is established only *after* the client connects to the server, when an application is launched, then the session is the period in definition (2) and is not yet established when the connection is first made. Thus, the scope of the claims under definition (1) would be materially different from the scope under definition (2). But the intrinsic evidence fails to tell a POSITA which of these two mutually exclusive definitions is the right one.

# E. As a Result, the "Communication Session" Terms Are Indefinite.

A POSITA reading the specification and the prosecution history of the Asserted Patents, including HDI's arguments in the IPRs, would not know, with reasonable certainty, what a "communication session" is or what it means to "establish" a communication session. Is it beginning to send application-specific information to another device as described in the

specification, or is it connecting (e.g., with a data socket connection) as described in the prosecution history? A POSITA also would not know, with reasonable certainty, what it means to "request" such a session, or how "requesting" a session is different from "establishing" a session. The patentee's statements in the specification and prosecution history provide conflicting, contradictory, and irreconcilable interpretations. They do not provide "clear notice of what is claimed, thereby apprising the public of what is still open to them." *Nautilus*, 572 U.S. at 909 (emphasis added). The claims are therefore invalid as indefinite.

This is not a case in which the ambiguity of the claim results from the "inherent limitations of language." *Nautilus*, 572 U.S. at 909. Rather, the ambiguity in this case stems from the patentee's use of functional language in the claims and the patentee's desire to manipulate the meaning of that language to avoid prior art. This case exemplifies the Supreme Court's concern that, without a meaningful definiteness check, patentee's face "powerful incentives to inject ambiguity into their claims." *Id.* at 910. Here, when confronted with prior art disclosing a server that executes an application and begins exchanging information with a client, the patentee argued that this does not constitute "establishing a communication session," even though that is what the patent's specification provides. Instead, the patentee argued that "establishing a communication session" refers to something entirely different—establishing a "connection"—that directly contradicts the specification. The patentee's failure to consistently define the term "lends force to the argument that the phrase is irresolvably ambiguous and indefinite." *Kyowa*, 2019 WL 5061066, at \*8.

The indefiniteness of these claim terms is further demonstrated by HDI's refusal to provide any construction for the terms. When provided the opportunity in the IPRs, HDI declined to say what it believes "establishing a communication session" actually means. And in

this litigation, HDI refuses to provide a construction, asserting instead that a POSITA "would understand the meaning of the terms and/or phrases in question as used in the context of the claimed inventions." (Ex. A1.) But as shown above, that is false. A POSITA would not understand the meaning of these terms because the intrinsic record provides no notice—let alone "clear notice" as the Supreme Court requires—to the public of what is claimed.

HDI's failure to provide a definition for this claim term is particularly telling given the term's importance. What a communication session is, and what it means to "request" and "establish" such a session, is not a peripheral issue. HDI relied on it to distinguish the prior art in the IPRs, and it will be at the heart of the infringement inquiry in this litigation. Where various potential meanings are the difference between whether a competitor infringes or does not infringe the patent, the ambiguity creates indefiniteness. \*Kyowa\*, 2019 WL 5061066\*, at \*9.

### III. THE "PROCESSING SERVICE(S)" TERMS ARE INDEFINITE.

The asserted claims generally require that the application server send the communication device a "request for processing service." These limitations are indefinite because HDI's representations to the Patent Office about the meaning of the phrase "request for processing service" cannot be reconciled with the specification. For example, HDI represented that a VoIP message (which contains digital audio and instructions for how to process it) is not a request for processing service, even though the specification shows the opposite. This contradiction in the intrinsic evidence would prevent a POSITA from clearly understanding the scope of the claims. Although HDI and Google each attempt to construe these terms, neither of their proposed constructions is fully consistent with the intrinsic evidence.

<sup>&</sup>lt;sup>8</sup> Because a POSITA would not know, with reasonable certainty, what a "communication session" is or when it is established, a POSITA would not know, with reasonable certainty, what a "preliminary communication session" is. Thus, this term is also indefinite. (Ex. A1, term 1c.)

# A. The Claims Provide Examples of "Processing Service(s)" But Provide No Boundaries on the Scope of the Limitation.

Some of the dependent claims in the Asserted Patents appear to provide some guidance as to what a "request for processing service" may include. For example, according to the dependent claims, the request may comprise an "instruction" sent to the client. According to some dependent claims, "processing service" refers to some function performed by the client, such as presenting information to the user, retrieving content, or performing a "communication and/or computing function." (See, e.g., Dkt. 1-2 ('483 patent) claim 17 (the "request for processing service" can comprise an "instruction to present information to the user") and claims 8-9 (request for processing service may comprise an instruction to the client to "retrieve content" or "send content"); Dkt. 1-7 ('935 patent) at claim 37 (request for processing service comprises an "instruction to collect information" from the client device and/or the user) and claim 23 (request for processing service may comprise an "instructions to perform a communication and/or computing function"); Dkt. 1-8 ('032 patent) at claim 1; Dkt. 1-9 ('816 patent) at claims 1 and 18 (request for processing service comprises an "instruction to present a user . . . the voice representation").) However, specifying that a request may "comprise" an instruction and that the instruction may include performing some unidentified "communication and/or computing function" hardly provides a POSITA with reasonable certainty regarding the scope of the claim.

Other claims use the phrase "processing services" even more vaguely. For example, claim 24 of the '483 patent recites that a thin-client software program provides processing services by "facilitating communication" between the user and the application server. (*See, e.g.*, Dkt. 1-2 ('483 patent) at claim 24.) Still other claims recite generic "processing services" without any further elaboration. (*See, e.g.*, Dkt. 1-7 ('935 patent) at claims 1, 6, 33; Dkt. 1-9 ('816 patent) at claims 1, 14.)

# B. The Specification Does Not Define "Processing Service(s)."

The specification does not define "request for processing service" or "processing service." The specification states that the "request for processing service" is communicated from the application server to the communication device over a data connection or network. (Dkt. 1-2 at Abstract, 1:57-62, 2:9-13, 2:22-26, 3:29-32). The specification discloses that the "processing services," whatever they are, may be performed by a client for an application server. (*See, e.g., id.* at 1:38-42, 3:65-4:1, 10:57-60.) However, these disclosures do not meaningfully limit the scope of "processing service."

The specification describes an embodiment in which the client provides "application independent processing services" to a Voice XML-based application executing remotely on a server. (*Id.* at 6:36-38.) That portion of the specification discloses that the client provides processing services by "assist[ing] with the collection of information from and/or the presentation of information to the user of client 18a[,]" such as by processing a user's response via a DTMF input, a voice input, a stylus input, a keyboard input, or other input. (*Id.* at 6:38-48, 6:55-67.)

In another embodiment, the specification provides that the "client 18b is adapted to provide processing services for application 28 that will execute remote from client 18b." (*Id.* at 8:51-54.) The specification describes that the "client 18b is capable of locally executing commands related to application 28 and delivered via the data connection." (*Id.* at 8:58-9:5.) The specification provides:

By executing these commands, client 18b enables information to be communicated to the user, to be retrieved from the user, to be presented to the user, and to perform any other desired communicating and/or computing functionality with the user. In some cases, the locally executed commands enable client 18b to retrieve information from database 26.

(*Id.*; see also id. at 9:12-24 (client may execute software and process user's input via keypad), 9:38-45 (client receives and outputs account balance received as data message or executable).)

In light of the specification, a POSITA would understand that a client provides a "processing service" when it provides *any* communicating and/or computing functionality that assists with the collection of information from or the presentation of information to the user.

# C. HDI Provided a Different and Contradictory Scope for "Processing Service" During Prosecution.

The original prosecution provides limited additional information regarding the meaning of the phrase "processing services." Consistent with the disclosure in the specification cited above, HDI explained in an Appeal Brief that the "processing services" "may enable, for example, information to be communicated to the user, to be retrieved from the user, to be presented to the user, to be retrieved by the user's client device, and/or to perform any other desired communicating and/or computing functionality." (Ex. A13 at 7.) However, HDI's statements during the Google IPRs must also be considered.

HDI argued in the Google IPRs that "processing service" has a different meaning than the meaning provided by the claims, specification, and original prosecution. In view of the HDI's statements in the IPRs, a POSITA would not know with reasonable certainty what falls within and outside the scope of "processing service."

### 1. Google's Arguments

In its IPRs, Google asserted that the Gilmore reference discloses sending a "request for processing service" to the client because Gilmore discloses that the voice gateway 108/208 (application server) sends over the data network "a prompt or message to which the user can respond[.]" (Ex. A5 at 27-28.) Specifically, Google asserted that, "when voice gateway 108/208 executes a VoiceXML application, it generates an audio prompt that requests the user to input

additional information, such as entering a PIN or passcode." (*Id.*; Ex. A6 ¶108.) According to Google and its expert, "One skilled in the art would have understood that generating outgoing prompts that the user responds to is communicating a request for processing service to the user voice communication device 102/202." (Ex. A5 at 29; Ex. A6 ¶109.)

### 2. HDI's Preliminary Patent Owner Responses

In its response to Google's IPR petitions, HDI recognized that Gilmore discloses a "Voice Over IP ('VoIP') connection used to connect and stream audio between callers." (Ex. A7 at 42; Ex. A10 at 49, 51; Ex. A8 ¶[0031] (system may use an "Internet protocol (IP)-based" network that supports voice using "Voice-over-IP").) A POSITA's understanding of Gilmore would therefore be informed by their understanding of VoIP. (Ex. A2 ¶¶47-48.)

VoIP refers to the ability to transmit voice communications over Internet Protocol (IP) networks, such as the Internet. (Ex. A2 ¶33.) In VoIP systems, the client device contains a "codec" (coder-decoder) that converts the analog voice signals—received when a user speaks into a microphone—to a series of digital samples. (*Id.* ¶37.) The client encodes the audio data with its codec and may compress it to reduce the file size. (*Id.*) The client then sends the encoded audio in packets, via a packet-switched network such as the Internet, to a server or other device with which the client is communicating. (*Id.*) A VoIP packet, or message, contains information in addition to the encoded audio (e.g., headers). (*Id.* ¶36.) As the receiving device (e.g., server) receives packets, it processes the messages and decodes the audio data.

When a server is sending VoIP messages containing audio to a client device, as also occurs in Gilmore, the server will encode the audio, package the data in VoIP packets, and send them to the client. (*Id.* ¶¶39, 46-47.) Upon receiving the VoIP packets, the client parses the data packets, uses a codec to convert the encoded audio data in the message to an analog signal, and outputs the audio through a speaker. (*Id.* ¶¶40, 47.)

Gilmore discloses that the client may be a "device able to interface with a user to transmit voice signals across a network such as, for example, a telephone, a cell phone, a voice-enabled personal digital assistant (PDA), or a voice-enabled computer." (Ex. A8 ¶[0030].) HDI's patents describe the same types of clients. (Dkt. 1-2 at 4:2-7 (client may include "for example, a wireless device, a voice over IP device, a desktop computer, a laptop computer, a personal digital assistant, a cell-phone, . . . or any other computing and/or communicating device").) Gilmore also discloses that the client communicates with the server over the same types of data networks as in the '483 patent. (Ex. A8 ¶[0031] (listing networks); Dkt. 1-2 at 3:41-53 (listing networks).)

HDI argued that the PTAB should not institute trial based, in part, on three arguments about the meaning of "request for processing services." First, HDI argued that Gilmore's client device would not perform any "processing service" even when receiving messages over VoIP. (Ex. A7 at 44 (all processing happens on the application server "even if the connection is a VoIP connection"); Ex. A10 at 50-52.) But, as explained above, in the VoIP context in which Gilmore operates, the gateway sends the client packets that include various information including the encoded audio. (Ex. A2 ¶47.) Gilmore's client device processes the packetized messages, decoding the audio, and plays the audio prompts through a speaker. (Id.) HDI's arguments in its POPR mandate that a "processing service" does not include receiving and processing packetized data, decoding audio, and playing the audio through a speaker. However, as discussed above, the claims and specification provide that this type of "processing" does fall within the scope of the claim language. (See, e.g., Dkt. 1-2 ('483 patent) at claims 17-18 ("the request for processing service comprises one or more instructions to present information to the user," including via audio output), Dkt. 1-7 ('935 patent) at claim 23 (request for processing service may comprise an "instructions to perform a communication and/or computing function").)

Second, HDI argued that Gilmore does not disclose a "processing service" because it describes the client as a "dumb phone" that "the user merely uses to listen to audio signals generated and played by the host" and to "speak or input touch-tone responses that the host processes," which HDI argues is not providing a "processing service." (Ex. A7 at 43, 44; Ex. A10 at 50.) But again, the specification teaches that this functionality is a "processing service," at least because receiving a signal and outputting the audio is receiving an instruction to present information to the user and/or to perform a communicating function. (Ex. A2 ¶47.) The specification also teaches that the client performs processing services when it receives and transmits a user's response via touch-tone (DTMF) input. (Dkt. 1-2 at 6:55-59; see also Ex. A2 ¶36.)

Third, HDI repeatedly argued in its POPR that a VoIP network is not capable of transmitting a "request for processing service." (Ex. A8 at 42 ("VoIP networks are not data connections capable of routing requests for processing service from an application server to a communication device."), 43 ("Even if [Gilmore's] connection is over VoIP, this is not the same as the claim requirements of the '483 Patent, at least because the VoIP connection does not provide a mechanism for the application server to send a request for *processing* service to the client[.]"), 44 (even if the potential use of VoIP in *Gilmore* satisfied the requirement of a 'data connection' over which a 'communication session' could occur, it would not allow for the sending of a request for 'processing service' from the application server to the communication device."); Ex. A10 at 49, 50, 51.) Accordingly, HDI has represented that, whatever a "request for processing services" is, it cannot be transmitted over a VoIP network. That representation directly contradicts the specification, which expressly provides that the client may be a "voice over IP device" that communicates with the application server over a network. (Dkt. 1-2 at 4:2-3; *see also id.* FIG. 1A (showing client 18d to be an "IP PHONE"); *see also* Ex. A2 ¶43-48.) Indeed, the specification de-

scribes an example in which the "client 18d"—an "IP phone"—receives an instruction from the application server to present flight information to the user by text or voice. (Dkt. 1-2 at 10:4-18.)

At the same time that HDI is arguing in the IPRs that transmitting VoIP messages containing audio to be parsed, decoded, and played to the user is *not* a "request for processing service," HDI is asserting that virtually identical functionality infringes the claims. As shown below, HDI alleges that Amazon servers send a "request for processing service" to an Echo device when the server sends a message with encoded audio data, and that the Echo provides the processing service when it parses the message, decodes the audio, and plays the audio through a speaker:

#### Claim 10 (cont'd) Application of U.S. Patent No. 9,264,483 to Amazon wherein the at least one The Amazon system further includes where the at least one application server is operable to application server is operable communicate a request for processing service to the at least one communication device (e.g., an to communicate a request for Amazon server is operable to send a request to an Amazon Echo, resulting in the Echo processing service to the at performing a processing function related to the request), and wherein the request for processing least one communication service is communicated to the at least one communication device over the data connection (e.g., device, and wherein the request via an internet or http connection). As a non-limiting example, the Amazon Alexa application for processing service is servers such as the AVS servers and/or the AWS Lambda servers implement multi-turn dialogs in communicated to the at least AVS and Alexa Skills to solicit information from, and confirm information and user request intent one communication device from the Alexa-enabled device, such as the Amazon Echo, and its users. As shown below, an over the data connection, and Amazon server may send a request for processing service (e.g., a "SPEAK" directive w/ encoded audio data) to a communication device (e.g., an Amazon Echo that plays the audio data to a user). Basic AVS request: Parse the response HTTP/1.1 200 OK Content-Type: multipart/related; boundary={BOUNDARY TERM} --{BOUNDARY TERM} Content-Type: application/json; charset=UTF-8 { "messageHeader": {}, "messageBody": "directives": [ { "namespace": "{AudioPlayer | SpeechSynthesizer}", "name": "{DIRECTIVE}", "payload" : { --{BOUNDARY TERM} Content-Disposition: form-data; name="audio" Content-Type: audio/mpeg Content-ID: {CONTENT ID} {ENCODED AUDIO DATA} $\leftarrow$ If directive is speak, play this back to the user Source: Exhibit 1, pg. 11. See also, Exhibit 2 at 16:30-18:30.

(Ex. A11 at 16.)

# D. HDI's and Google's Proposed Constructions of the "Processing Service(s)" Terms Are Incorrect.

Because the meaning of the "request for processing service" and "processing service(s)" terms are unclear in view of the specification and prosecution history, neither HDI nor Google can propose a construction that is consistent with all of the intrinsic evidence.

HDI's proposed construction defines a "request" as "computer code instructions to a processor." This is incorrect for several reasons. First, it would result in the term "request" having different meanings in the same claim because the claims also recite a client's "request" to a server to establish a communication session, yet HDI has not proposed that "request" as recited in that limitation means "computer code instructions to a processor." (*See* Ex. A1.)

Second, HDI's proposed construction does not reflect the plain meaning of the common term "request." Indeed, even the single dictionary that HDI cited in its disclosure of extrinsic evidence for a definition of "request" does not define the term as HDI does. (Ex. A12 (defining request to mean "[t]he requirement for service that came from a requester").)

Third, HDI's proposed construction does not resolve the ambiguity in the claim because it leaves unclear whether "computer code instructions to a processor" includes, for example, a packetized message containing an instruction or command to the client to perform a function such as to output audio via a speaker. This is the type of message HDI represented during prosecution is *not* within the scope of the claim, yet certain dependent claims and HDI's infringement contentions indicates *is* within the scope of the claims.

HDI's proposed construction for "processing service" is also inconsistent with the intrinsic evidence because it contradicts HDI's prosecution statements. HDI proposes that "processing service" be construed to mean the "automated operation of a hardware component." Yet, HDI argued during prosecution that receiving audio via a VoIP network and outputting that audio did

not constitute providing a "processing service." HDI made that argument even though a VoIP message causes the automated operation of hardware components, including at least a decoder that decodes the encoded audio and a speaker that outputs the audio to the user. Thus, HDI's proposed construction for "processing service" directly contradicts its statements regarding the scope of that phrase during prosecution.

Google, on the other hand, proposes that "processing service" be construed to mean a "computing process performed by a communication device for the application that constitutes more than acting as a speaker or input device." (Ex. A1.) This proposed construction, although it more closely aligns with HDI's arguments in its POPR, does not reconcile the meaning of "processing service" with HDI's arguments. A VoIP device, as disclosed in Gilmore, does more than merely act as a speaker or input device. It receives and processes packetized audio data, decodes the encoded audio data via a codec, and plays the audio through a speaker. (Ex. A2 ¶40, 47.) Likewise, the input functionality of Gilmore's VoIP device, which HDI represented falls outside the scope of "processing service," consists of more than merely "acting as an input device." A VoIP device, as disclosed in Gilmore, captures analog audio (speaker's voice), digitizes it, optionally compresses it, and creates and transmits packets containing the encoded audio data. (Ex. A2 ¶48.)

### E. The "Processing Service[s]" Terms Are Indefinite.

In view of the specification and the conflicting, contradictory, and irreconcilable interpretations adopted by the patentee during prosecution, the "processing service[s]" terms are indefinite. The Asserted Patents are not "precise enough to afford *clear notice* of what is claimed, thereby apprising the public of what is still open to them." *Nautilus*, 572 U.S. at 909 (emphasis added). For example, a POSITA would not know, with reasonable certainty, what it means for a server to send a request for processing services. The claims mandate that an

instruction for the client to present information to the user via an "audio output" such as a speaker would fall inside the scope of the claims. However, HDI's statements in the prosecution history mandate that instructions for a VoIP device to present audio information to a user via a speaker fall outside the scope of "request for processing service." Likewise, a POSITA would understand from the specification that an "IP Phone" is an example of a client that receives a request for processing services over a VoIP network and performs those services. (Dkt. 1-2 at FIG. 1A.) But HDI's statements during prosecution contradict that disclosure, and represent to the public that a VoIP device, as disclosed in Gilmore, could not receive a request for processing services or perform any such services. (Ex. A7 at 42-44.) Likewise, a POSITA would understand from the specification that a "request for processing services" could be sent via the Internet (Dkt. 1-2 at 3:41-53), but that is contradicted by HDI's statements during prosecution that "VoIP networks," which include the Internet, are not "capable of routing requests for processing service[s] from an application server to a communication device." (Ex. A7 at 42.)

Given that the phrases "processing service" and "request for processing service" do not have any specialized meaning in the art and the patentee's statements in the prosecution history regarding the meaning of these phrases conflict with the specification, a POSITA would not know, with reasonable certainty, what it means for a server to send a "request for processing service" or for a client to provide a "processing service."

#### IV. THE ASSERTED CLAIMS OF THE '937 PATENT ARE INDEFINITE.

Claim 1 of the '937 patent recites a communication device comprising a memory and a software program. When executed, the software program "causes the communication device to: establish a communication session to an application server over a first communication link[.]" The claim further recites that "the application server [is] adapted to execute an application to es-

Thus, this claim requires both the client device and the application server to establish the communication session. However, it is impossible for both devices to do so. (See Ex. A7 at 37 (Gilmore's server does not establish the communication session because the client does so).) Because both devices cannot establish the communication session, a POSITA would not know, with reasonable certainty, what this claim covers. Thus, it is indefinite. Because asserted claims 3, 10, and 17 all depend from claim 1, they are likewise invalid as indefinite.

#### V. HDI'S IDENTIFIED TERMS NEED NOT BE CONSTRUED

Where "the ordinary meaning of claim language as understood by a [POSITA] may be readily apparent even to lay judges," claim construction requires "little more than the application of the widely accepted meaning of commonly understood words." *Phillips*, 415 F.3d at 1314; *Brown v. 3M*, 265 F.3d 1349, 1352 (Fed. Cir. 2001) ("These are not technical terms of art, and do not require elaborate interpretation."). This is the case for the three terms identified by HDI for construction: (1) "audio data;" (2) "packetized voice data;" and (2) "voice representation." None of these terms requires construction.

#### A. Audio Data

The phrase "audio data" does not have a special meaning in the context of the asserted patents and is readily understandable to a layperson. Therefore, it need not be construed. *Phillips*, 415 F.3d at 1314; *Brown*, 265 F.3d at 1352.

Even if the term did require construction, HDI's proposed construction should be rejected because it attempts to limit the data to "digital" audio data. Nothing in the intrinsic or extrinsic record suggests that "audio data" must be digital; audio data can be analog. Indeed, the specification expressly provides for the possibility that the data may be analog because it discloses that the communication links provide for the communication of "analog and/or digital signals." (Dkt.

1-2 at 5:3-6.) The asserted patent also discloses embodiments in which the network may be a public switched telephone network, which carries analog and digital signals. (*Id.* at 3:47-53.)

HDI's proposed construction should also be rejected because it is more complicated than the original claim term and will only raise more questions for the jury. For example, it will require the parties to explain what an "audible signal" is and what constitutes a "digital representation" of such a signal. In contrast, a jury can readily understand the term "audio data." Thus, HDI's proposed construction should be rejected.

#### **B.** Packetized Voice Data

The phrase "voice data" does not have a special meaning in the context of the asserted patents and is readily understandable to a layperson. Thus, that portion of the term need not be construed. *Phillips*, 415 F.3d at 1314; *Brown*, 265 F.3d at 1352. While "packetized" may be a technical term, neither HDI's nor Google's proposed constructions further clarify the meaning of that term for the jury. Instead, both HDI and Google merely rephrase "packetized" as "organized into packets," which does little to explain the meaning of the term. Thus, Amazon believes that the phrase "packetized voice data" requires no construction.

### C. Voice Representation

The phrase "voice representation" is commonly understood to mean "a representation of a voice." As such, this term would be understood by lay jurors and need not be construed. *Phillips*, 415 F.3d at 1314; *Brown*, 265 F.3d at 1352.

HDI's proposed construction should be rejected for three reasons. First, it re-arranges the words of the phrase to be construed ("voice" and "representation"), which is unhelpful. *See Securus Techs.*, *Inc. v. Glob. TelLink Corp.*, No. 3:13-CV-03009-K, 2015 WL 356872, at \*6 (N.D. Tex. Jan. 27, 2015) ("Simply reusing the phrase 'composition station' and rearranging the order of the other words in the phrase does not help a jury understand what a composition station is.").

Second, it limits the type of representation (digital) and the type of voice ("synthesized, audible"), even though nothing in the claims, specification, or prosecution history requires a "voice representation" to be limited to a digital, synthesized, audible voice representation. HDI's proposed construction is an attempt to import limitations into the claim in an attempt to avoid prior art that disclosed transmitting other types of voice representations.

Third, HDI's proposed construction would require additional explanation for the jury because it would require the parties to explain what a "digital" signal is, what a "synthesized" voice is, and what an "audible" voice representation is. Because it would lead to even further ambiguity and require further explanation, HDI's proposed construction should be rejected. *See, e.g., Everything Baseball Ltd., LLC v. Team Athletic Goods Inc.*, No. 05 C 5526, 2007 WL 2608551, at \*17 (N.D. Ill. Sept. 4, 2007) ("[T]he term 'back' is sufficiently within common knowledge that it does not have to be further defined as 'opposite' the front; indeed, the meaning of 'opposite' likely would itself need to be construed.").

Accordingly, the Court should hold that the terms "audio data," "packetized voice data," and "voice representation" have their plain and ordinary meaning and do not require construction.

#### **CONCLUSION**

For the reasons set forth above, Amazon respectfully submits that the terms at issue should be construed as follows:

No.	Claim Term	Construction
1a	"request to establish [a / the] communication session"	Indefinite
1b	"establish [the / a / the requested] communication session"	Indefinite
1c	"preliminary communication session"	Indefinite

No.	Claim Term	Construction
2	"a memory that causes the communication device to: establish a communication session to an application server over a first communication link, the application server adapted to execute an application to establish the communication session with the communication device"	Indefinite
3a	"request for [a] processing service"	Indefinite
3b	"processing service(s)"	Indefinite
9	"audio data"	Plain and ordinary meaning.
10	"packetized voice data"	Plain and ordinary meaning.
11	"voice representation"	Plain and ordinary meaning.

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### Respectfully submitted,

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## **CERTIFICATE OF SERVICE**

I hereby certify that a true and correct copy of the above and foregoing document has been served on all counsel of record via the Court's ECF system on March 13, 2020.

/s/ Brian C. Nash Brian C. Nash